REMARKS

The claims have been amended for clarification. The word "isolated" has been added to claim 40 at the Examiner's request. No new matter has been added and entry of the amendment is respectfully requested.

Formal Matters

The acknowledgement of the drawings is appreciated.

With respect to JP11/164691, this patent was cited because there was a 79% alignment over 499 nucleotides with a nucleotide sequence set forth in that application on pages 36-37 with nucleotide 66-1085 of SEQ. ID. No.: 1. Applicants request that this item be considered and made of record by the Office in prosecution of this application.

The accordation of priority to 1 June 1999 is acknowledged.

The specification has been corrected to cite to the patent issued on the parent applicant and to delete the provisional information on pages 49-50. As priority as been accorded only to 1 June 1999, this material has been deleted, rather than moved to page 1. The hyperlinks noted by the Office have been deleted.

The issue of the vector numberings on page 48 is mooted by the amendment.

As to page 36, line 5, "RSACDN" is a conventional notation for oligonucleotide sequences with choices at individual positions. The enclosed table is that approved by 37 C.F.R. for sequence listings. As noted, R represents G or A, S represents G or C, A and C are conventional, D represents A or G or T/U and N represents any nucleotide.

A replacement Abstract correcting the spelling of "STEAP" is submitted herewith.

The Rejection Under 35 U.S.C. § 101

It is believed this basis for rejection has been obviated by the requested amendment to claim 40. The claim has been amended to verify that this is an isolated peptide, *i.e.*, removed from its natural surroundings.

Double-Patenting

The double-patenting rejection has been considered. As to co-pending application 10/011,095, with claims to antibodies directed to the STEAP-1 protein, reconsideration is requested. While it may theoretically be the case that monoclonals can be obtained from isolated antigens, a restriction requirement in the parent application (copy enclosed for convenience) clearly distinguishes peptides from antibodies that immunoreact with them. As 10/011,095 was filed as a separate application because of this restriction requirement, it is believed that the double-patenting rejection is improper and should be withdrawn.

With respect to U.S. 6,329,503, applicants acknowledge that a terminal disclaimer was referred to in the preliminary amendment. However, upon review of the issued claims in comparison with those currently proposed, it is believed that a terminal disclaimer with respect to this patent is unnecessary. The Office acknowledges that discrete peptides which are portions of a longer protein sequence are patentable thereover. This is evidenced, for example, by the fact that the peptide represented by positions 14-28 of SEQ. ID. No.: 2 properly was not rejected over Abu-Threideh. The peptide was claimed as one "consisting of" the relevant amino acid sequence. No rejection was made because the GenBank entry of the larger protein did not defeat patentability of the novel subsequence. Similarly, the present claims are directed only to specific peptides and the claims in the parent are directed to the full-length protein. For the same reason

these peptides are patentable over the GenBank entry, they are not obvious over the claims issued in the parent. Accordingly, withdrawal of the rejection is requested.

The Rejections Under 35 U.S.C. § 102

Claims 40 and 42-45 were rejected as anticipated over a GenBank entry which discloses a protein of 339 amino acids and which contains embedded therein the amino acid sequences of the discrete peptides claimed. Applicants appreciate the explanation given to their undersigned representative in a telephone conversation with the Examiner that the basis for this rejection lay in the open language previously used to describe these peptides in the claims. This has now been corrected, and thus this basis for rejection is obviated.

Claims 41 and 46-47

It is noted that claims 41 and 46-47 were considered free of the art.

CONCLUSION

The claims have been amended to clarify that discrete peptides are being claimed thus obviating the only outstanding art rejection. It is noted that claims 41, 46 and 47 were considered free of the art. It is believed that terminal disclaimers are unnecessary with respect to the parent for the same reason that the present claims are patentable over the cited art and that a terminal disclaimer with respect to the co-pending divisional is precluded by the restriction requirement set forth in the parent. All formal objections have been met. Therefore, it is believed that claims 40-47 are in a position for allowance and passage of these claims to issue is respectfully requested.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicants petition for

any required relief including extensions of time and authorize the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket No. 511582001621.

Respectfully submitted,

Dated: October 15, 2003

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(84) Designated contracting states:	(74) Representative:

(54) BLASTOCYST CDNA

(57) Abstract:

PROBLEM TO BE SOLVED: To obtain a blastocyst cDNA extremely useful for systematic study of embryogeny consisting of a single chain DNA originating from the blastocyst cDNA including a specific base sequence, the complementary chain, study on the molecular mechanism of adjusting initial imbedding embryogeny.

SOLUTION: The DNA is either one

of a new single chain DNA compressing either one of the base sequence described in the formula I to III and the like, or including the either one of the base sequence described in the formula I to III and the like, or a single chain DNA complementary to the prescribed single chain DNA, extremely useful for the systematic study on the formation of embryogeny, the molecular mechanism adjusting initial imbedding embryogeny. This blastocyst cDNA is obtained by collecting the blastocyst from a natural mouse pair, separating all the RNA and constructing a cDNA library in conventional process, and screening this with a probe prepared by using PCR utilizing the reverse transcription enzyme(RT).

```
  1 GGAAGAAGTC CATTCCCTAA TCCCTCTCCG AGGATCCAGC AAAAGGGAAG
 51 CCCGCCAGAG GACAAAAAAC AGGAAGAAGG GAGGAACAGA AAGGAGAGGA
101 GGAACAATTC AAAACAAAGG GTCGGAGGCA AAGAGGAGAA AAAAAAAAAA
151 AAAAAAAAAA AAAAAAA
```

I

```
  1 ATGGTNGGGT CTNTTCCGTC TGAGGATGGT CATCGACGGA GTGTGAGCTT
 51 TCTTAAAANNG CGNGGGNTGT AGTTCTGGGA CTTCCTCATT TCTTNGTTAT
                                    :
                                    :
                                    :
                                    :
251 ATAGATTATG TGGGTGAGTC AGGATCTTGT TATNGCAATC ACGGAGGTGT
301 AACGATNCTC CTACGGCTAT TCAATAAAAN TACTCAAAAA A
```

II

```
  1 GATAAATTNG GATACNTCAG AATGANAGAA GCAGAAGGGG TGAAGATTCA
 51 ATAAACCTGT AAGCTGGAGA GTAAGAAGGC TGCCCGGNGG TTAGNTTGGA
                                    :
                                    :
                                    :
501 TCAGTAGCAG TTTTATTTAA CTGCTTTTNT GCGTTTAAGA TTGTTGTGGT
551 TTTTGTTTTT AATTATTTTT GCTTATTAAT AAAAAAGGAA G
```

III

Appendix 2

Nucleotid and amino acid symbols and featur table

Table 1: List of Nucleotides

Symbol	Meaning	Origin of designation
a	a	adenine
g	g	guanine
c	c	cytosine
t	t	thymine
u	u	uracil
r	g or a	purine
y	t/u or c	pyrimidine
m	a or c	amino
k	g or t/u	keto
s	g or c	strong interactions 3H-bonds
w	a or t/u	weak interactions 2H-bonds
b	g or c or t/u	not a
d	a or g or t/u	not c
h	a or c or t/u	not g
v	a or g or c	not t, not u
n	a or g or c or t/u, unknown, or other	any